

## Transmittal Form

This form transmits all the documents in this folder under  
one Doc ID for the entire Oil Site

  
Jolleen Werst  
Superfund Records Manager

30031811



Superfund

Site Name

Letton Industries

DATE OF LAST SITE FILE ACTIVITY

5-27-99 - Folder Made

SEPARATOR  
PAGE

EPA #: \_\_\_\_\_

17032-DM-1655

MISSOURI DEPARTMENT OF NATURAL RESOURCES  
ENVIRONMENTAL EMERGENCY RESPONSE REPORT  
(Use Back of Page to Complete Items)

County: Greene

17 3 82 DM  
(Day, Mo., Year) Initials

16:55 ☒ Summarized  
Time

Date Closed: \_\_\_\_\_

1. Occurred: Time: \_\_\_\_\_ Date: \_\_\_\_\_

Name Organization Address Phone

2. EER Called By A: Burt McCullough, Springfield Regional Office

3. Reported to A By B: \_\_\_\_\_

4. Reported to B By C: \_\_\_\_\_

5. Responsible Party: \_\_\_\_\_ Litton Industries Springfield

Site: Litton Industrial  
ID: \_\_\_\_\_  
Break: 16  
Other: \_\_\_\_\_  
3-17-82

6. Material(s): \_\_\_\_\_ Amount: \_\_\_\_\_

Additional Possible: \_\_\_\_\_

7. Incident Location: Nearest Town: \_\_\_\_\_ County: Greene

Directions to Site: \_\_\_\_\_

8. Officials On Scene: Fire ☐, Police ☐, Sheriff ☐, Hwy. Patrol ☐, MDNR ☐, EPA ☐,  
Coast Guard ☐, \_\_\_\_\_

9. Incident Description and Response: A sinkhole (8' x 10') developed 20 to 30 feet from the  
8 million gallon waste lagoon. The groundwater in this area is highly interconnected.  
Burt McCullough indicated that dye tracings in this area show interconnections with  
Fantastic Caverns and several area springs.

1715 (KS) - Jim Van Dyke (Div. of Geology & Land Survey) returned our call on the emergency  
line. He was appraised of the situation. He was aware of the general conditions at the  
Litton site. He was given Burt McCullough's phone number to contact and would visit the  
site 18 March 82.

(over)

10. Mode: Storage ☒, Motor Carrier ☐, Railroad ☐, Pipeline ☐, Other ☐, \_\_\_\_\_  
11. Type: Petroleum ☐, Ag Chemical ☐, Other Chemical ☒, Radiological ☐, Other ☐  
12. Medium: Land ☒, Water ☒, Air ☐, Direction and Speed of Travel: \_\_\_\_\_  
13. Resources Threatened: People ☐, Water Supply ☐, Surface Water ☐, Ground Water ☒,  
Livestock or Food Product ☐, \_\_\_\_\_

14. Notifications: Name, Organization, Date, Time, Phone

USEPA 816-374-3778

Regional Office called us

Jim Van Dyke, Div. of Geology & Land Survey, 17 Mar. 82, 1715

Waste Management (by Burt McCullough), 18 Mar. 82, 0830

Dick Duchrow, Conservation, 18 Mar. 82, 0830

Jim Penfold, Water Pollution Control, 18 Mar. 82, 0830

Louise White, Greene Co. Civil Preparedness, 417-868-4001,  
19 Mar. 82, 1100

15. MDNR Duty Officer: \_\_\_\_\_

Dean Martin

16. Distribution: USEPA

Conservation

Waste Management

Water Pol. Control

Geology & Land Survey

18 Mar. 82

14:45 - Tom Dean, Jim Van Dyke (Geology & Land Survey) and Burt McCullough (Springfield RO) reported in. The geological assessment is that the lagoon berms are very unstable that the lagoon could fail at any time. Freeboard is only 4 to 8 inches in violation of previous departmental orders. In addition, Litton has built up the berms to raise the liquid depth to 10 feet. The increased head has contributed to the instability of the berms and an increase in flow rate through the berms. The geologists believe that lowering the head on the lagoon by 2 to 3 feet would help take the pressure off the system and significantly lower the possibility of its catastrophic failure. The liquid wastes have heavy metals and organic pollutants, though not at high enough concentrations to be hazardous waste. The bottom sludge has these same materials at much higher levels and is a hazardous waste.

Several options were discussed for lowering the lagoon level. In attendance at this discussion were Bob Schreiber, Tom Dean, Jim Van Dyke, David Bedan, Art Groner, Jim Penfold, Ken Arnold, Burt McCullough, Dean Martin and Treva Hearne. Fred Lafser was advised of the results of the discussion. The options discussed were:

1) Pumping lagoon contents via new sewer line to wastewater treatment plant. This was rejected due to the possibility of upsetting the biological treatment process at the plant.

Direct routing of the lagoon contents to the river via the sewer system was also rejected because of the high ammonia content and other toxic constituents of the waste would cause extensive damage to aquatic river life. Also, the city has not accepted the sewer system from the contractor.

2) Hauling the waste by tank truck was rejected because the amount that could be moved in this manner would not lower the lagoon level at nearly a fast enough rate to be of any use.

3) Irrigation of the lagoon contents (water portion) on the 30 to 40 acres of Litton's property and any other available property using agricultural irrigation methods was the option decided on. This controlled release over a large area was decided to be much preferable to the possibility of a catastrophic release should the lagoon fail. It would also provide some possibility of treatment (soil cation exchange of heavy metal ions and vaporization and degradation of organics). Drawbacks include the fact that the area has a number of sinkholes that interconnect to the groundwater system, the soil is near saturation and the waste liquid contains a number of harmful pollutants. A number

(con'd on next page)

Greene County  
17 March 82

of steps were taken to minimize these limitations. Tom Dean and Jim Van Dyke suggested the application be limited to  $\frac{1}{4}$ " per day. At this rate it would take 16 days to lower the lagoon by 3 feet with a total application of 4 inches over 30 acres. Ken Arnold (Water Pollution Control) calculated from what is known of the pollutant levels that the area could accept a total application of about 16 inches and still be within guidelines. Application would be done such that the liquid would not be applied directly to sink holes.

Ron Enos (Litton Systematics, Inc., President) was informed by phone of the decisions reached. Robert Schreiber (Director, DEQ) read a draft of the Imminent Hazard Order to be issued 19 March 82 under Fred Lafser's (Director, DNR) signature. Another document to detail the actions to be taken by Litton (Emergency Directive) was also being drafted for issuance on 19 March 82 under Dave Bedan's (Waste Management) signature. Mr. Enos agreed to rent the necessary irrigation equipment and begin bringing down the lagoon level as per instructions from the department.

Arrangements have also been made to sample the lagoon contents, at the surface, at three and the bottom sludge. Larry Alderson (Lab. Services Program) will take those samples on 19 March 82.

Conservation was contacted and advised. They provided following information on the aquatic life that would be endangered should the lagoon fail. Dick Duchrow listed some of the aquatic life that could be affected:

Ozark Cave Fish (rare in Missouri)  
Southern Cave Fish  
Blind Crayfish  
Blind Salamanders  
Cave Invertebrates

Sculpins  
Red Bellied Dace  
Orange Throated Darters  
Green Sanfish  
and a variety of other cave species.

19 March 82

Geology & Land Survey requested additional samples be taken at Fantastic Caverns, Ritter Springs and Fulbright Springs for copper, pH, dissolved oxygen and nutrient series.

10:00 - Robert Schreiber said the city might make one of their holding lagoons at their wastewater treatment plant available to hold some of the wastes. Burt McCullough was working with the city to encourage this option.

(over)

11:00 - Louis White, Greene Co. Civil Preparedness, was contacted and advised of the situation. She indicated that she would be in contact with the county health dept. that if any questions came up they would get back to us.

15:00 - The Water Pollution Control Program evaluated the available data and determined that the Northwest Wastewater Treatment Plant could accept as much as 500,000 to 2.5 million gallons per day of "A pond" wastewater without serious harm to the plant provided adequate safeguards and testing are conducted of influent and return and activated sludge. Sludges that might be harmful could be routed to one of the sludge drying beds.

Burt McCullough (Springfield RO) called. The city is ready to begin accepting the wastes from Litton later today, initially at a rate of 30,000 GPD and increasing that figure in a day or two if the treatment plant is not adversely affected. Litton will continue to make provisions and begin irrigation to lower the levels in the lagoon as quickly as possible at an application rate of  $\frac{1}{4}$ " per day not to exceed 16 inches.

16:00 - Burt McCullough reported that the city would be accepting approximately 180,000 GPD.

16:15 - The Emergency Directive was sent to Litton using the telecopier and the EPA's Waste Management Section.

6 April 82

John Nixon (Springfield RO) was contacted. Litton continues pumping waste to the Northwest plant and irrigating. Arrangements are being made to pump waste to the Southwest plant using pipe from the National Guard in Nevada. No adverse affects have been noted on the Northwest plant due to the Litton waste.

13 April 82

John Nixon was contacted. Pipe is being strung to Southwest plant.

26 April 82

Burt McCullough (Springfield RO) was contacted. Pipeline to Southwest treatment plant in use Wednesday at 500,000 gallons/day. Water phase  $2\frac{1}{2}$  to 3 feet deep and should be emptied by the end of the week.

3 May 82

Burt McCullough reported that the emergency phase has been closed out with the expiration of the emergency directive. The aqueous waste from Litton has been pumped to the Springfield POTW's. Disposal of the wastes remaining in the lagoon will be handled by Waste Management and be disposed of as appropriate; either as hazardous waste or solid

BEFORE THE  
DEPARTMENT OF NATURAL RESOURCES  
STATE OF MISSOURI

In the MATTER OF

Advanced Circuitry Division	)	
Litton Industries Incorporated	)	No. 82-001
Springfield, Missouri	)	
	)	
	)	

ORDER TO CEASE AND CORRECT

IMMINENT HAZARD

1. Under the authority of Section 260.420 of the Revised Statutes of Missouri 1980, the Advanced Circuitry Division, Litton Industries Incorporated, its officers, agents, employees and assigns are hereby ordered to cease the hazard created by the condition of their industrial process wastewater lagoon generally and hereinafter referred to as the "A pond", and immediately correct the imminent hazard present in an environmentally safe manner approved by the Department of Natural Resources.

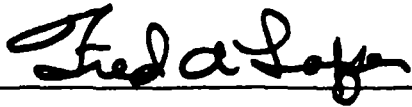
The imminent hazard is created by:

- a. The presence of toxic and hazardous materials in the aforementioned "A pond";
- b. The unstable condition of the "A pond" berms;
- c. The land surface at risk of contact with the escape of the large volume of liquid and sludges contained in the "A pond" is Karst topography, as evidenced by the presence of sinkholes and a recently occurring sinkhole immediately adjacent to the "A pond" berm, and;
- d. The sinkholes cause a direct connection between the land surface aforementioned and the groundwater system of the area which in-



Be it known that for the reasons of the aforementioned conditions, the Department of Natural Resources declares that the Advanced Circuitry Division, Litton Industries, Inc. has created an imminent hazard which may cause serious environmental harm and hereby orders such hazard to cease immediately.

Ordered this 18th day of March 1982



Fred A. Lafser, Director  
Missouri Department of Natural Resources

Copy of the foregoing served by Certified Mail to:

Ron Enos, President  
Advanced Circuitry Division  
Litton Industries Incorporated  
P. O. Box 2847, 4811 W. Kearney  
Springfield, Missouri 65803

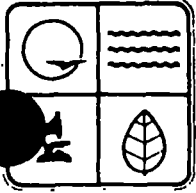
on this 18th day of March 1982

---

cc: Missouri Attorney General's Office  
Attention: Ed Downey  
✓ Broadway Building  
Jefferson City, Missouri 65101

Mr. John Nixon  
Springfield Regional Office  
1155 East Cherokee Street  
Springfield, Missouri

Waste Management Program  
Missouri Department of Natural Resources  
P. O. Box 176  
Jefferson City, Missouri 65102



MISSOURI DEPARTMENT OF NATURAL RESOURCES  
P.O. Box 1368 2010 Missouri Blvd. Jefferson City, Missouri 65102 (314) 751-3241

March 19, 1982

CERTIFIED MAIL P26 0335885

Mr. Ron Enos, President  
Advanced Circuitry Division  
Litton Industries, Inc.  
P. O. Box 2847  
4811 West Kerarney  
Springfield, Missouri 65803

Dear Mr. Enos:

The Department of Natural Resources is issuing an emergency directive to Advanced Circuitry Division of Litton Industries, hereinafter referred to as "Litton ACD", to dispose of wastewater in an environmentally safe manner from industrial process wastewater lagoon generally and hereinafter referred to as "Pond A". This emergency directive is in conjunction with the "Order to Cease and Correct Imminent Hazard" issued under the authority of Section 260.420, RSMo., 1980. This directive, in accordance with 10 CSR 25-7.011(2)(F), will authorize Litton ACD to take the following actions:

- (1) Litton ACD shall discharge as much wastewater as possible and acceptable to the Springfield city sewer until Pond A is lowered at least three (3) feet.
- (2) As an alternate to paragraph (1) and as may be necessary to achieve desired lagoon level reductions, wastewater from Pond A shall be applied by spray irrigation on ACD property (30 acres more or less available for spray irrigation) at a rate of approximately 1/4 inch per day until Pond A level is lowered at least three (3) feet.
- (3) Wastewater shall not be applied directly to any known sinkholes on the property.
- (4) A final decision on the adequacy of lowering the level of the pond three feet will be made by the Department after that action is completed. The Department may request that additional wastewater be removed from Pond A if it is seen that three feet is not adequate to stabilize the lagoon.
- (5) Litton ACD shall hire its own geotechnical engineer experienced with dam design to evaluate the stability of the lagoon berms and the surrounding topography. Confirmation that this has been accomplished shall be provided to DNR by March 22, 1982.
- (6) Litton ACD shall report to DNR Springfield Regional Office on a daily basis advising DNR of their progress. A log of all actions taken by Litton regarding this project shall be maintained and provided DNR on a weekly basis. The Department can be reached in the event of an emergency at (314)634-2436 (24 hour number).

Christopher S. Bond Governor  
Fred A. Lafser Director

Division of Environmental Quality  
Robert J. Schreiber Jr., P.E. Director

Mr. Ron Enos  
March 19, 1982  
Page 2

- (7) Litton shall not take any action not expressly specified in this directive unless prior approval is given by DNR.

This emergency directive will expire on April 4, 1982, unless the Department Director finds it necessary to terminate it sooner in order to protect human health and the environment. This directive does not preclude Litton ACD from complying with other state or federal laws and regulations.

Sincerely,



Robert J. Schreiber, Jr., P. E.  
Director  
Division of Environmental Quality

RJS/vlw

cc: Ed Downey, Attorney General's Office  
U. S. EPA Region VII  
Water Pollution Control Program  
Springfield Regional Office  
Waste Management Program  
Laboratory Services Program

*Re: 7/22/82*

*ATTN: Dean Martin - Lab*

**TO: DAVID BEDAN, Ph.D.**  
Director, Solid Waste Management Program  
Missouri Department of Natural Resources  
P.O. Box 1368  
Jefferson City, Mo. 65102  
Phone: 314/751/3241  
Facsimile Number 751-3222

**FROM: Robert L. Morby**  
Chief, Waste Management Branch  
Air and Waste Management Division  
U.S.EPA, Region VII  
324 E. 11th Street  
Kansas City, Mo. 64106  
Phone: 816/374-6531

**2 PAGES TO FOLLOW**



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VII  
324 EAST ELEVENTH STREET  
KANSAS CITY, MISSOURI 64106

**DRAFT**

THE REGIONAL ADMINISTRATOR

Mr. Ron Enos  
President, Advanced Circuitry Division  
Litton Industries Incorporated  
P.O. Box 2847  
Springfield, Missouri 65803

Dear Mr. Enos:

This is to confirm the issuance of an Emergency Resource Conservation and Recovery Act (RCRA) permit to Litton Systems, Incorporated at 4811 Kearney, Springfield, Missouri for the land treatment and removal of liquids from the storage lagoon onto the land. The permit number issued is MOP000000104. The conditions for which the wastewater from the storage lagoon (A pond) will be applied to the land owned by Litton Industries, Incorporated are as follows:

1. Litton Advanced Circuitry Division (ACD) shall discharge as much wastewater as possible and acceptable to the Springfield city sewer until Pond A is lowered at least three (3) feet.
2. As an alternate to paragraph (1) and as may be necessary to achieve desired lagoon level reductions, wastewater from Pond A shall be applied by spray irrigation on ACD property (30 acres more or less available for spray irrigation) at a rate of approximately 1/4 inch per day until Pond A level is lowered at least three (3) feet.
3. Wastewater shall not be applied directly to any known sinkholes on the property.
4. A final decision on the adequacy of lowering the level of the pond three feet will be made by the Missouri Department of Natural Resources (MDNR) after that action is completed. The MDNR may request that additional wastewater be removed from Pond A if it is seen that three feet is not adequate to stabilize the lagoon.
5. Litton ACD shall hire its own geotechnical engineer experienced with dam design to evaluate the stability of the lagoon berms and the surrounding topography. Confirmation that this has been accomplished shall be provided to the MDNR by March 22, 1982.
6. Litton ACD shall report to the MDNR Springfield Regional Office on a daily basis advising the Department of their progress. A log of all actions taken by Litton regarding this project shall be maintained and provided the MDNR on a weekly basis. The MDNR can be reached in the event of an emergency at (314) 634-2436 (24 hour number).

DRAFT

7. Analyze the quality of the wastewater within four days from the date of this permit to determine if the wastewater effluent is hazardous or whether it is non-hazardous. Report by telephone those results to Mr. Robert Morby of my staff no later than March 24, 1982, at 2 p.m. These results will be used to determine whether the above conditions will be retained or modified.

8. It is recommended that Litton analyze the application site soils for background levels of heavy metals.

9. Litton shall not take any action not expressly specified in this directive unless prior approval is given by MDNR.

The permit shall be effective as of March 19, 1982, and shall be in effect until April 4, 1982.

If you have any questions, please contact Robert L. Morby, Chief, Waste Management Branch at (816) 374-6531.

Sincerely yours,

John J. Franke, Jr.  
Regional Administrator

2334.0

## QUALITY CONTROL LABORATORY ANALYSIS TEST REQUEST

1 OF \_\_\_\_\_

Originator <b>D EDWARDS</b>	Dept. <b>PA</b>	Ext. <b>329</b>	Date <b>3-12-82</b>
Re Req'd <b>3-16-82</b>	Time Req'd	Approval	Shift <b>1</b>

## SAMPLE DESCRIPTION:

LAGOON  
A POND

## ANALYSIS/TEST REQUIRED (EXPLANATION FULLY):

TOTAL METALS - Cu Ni Cr Pb Zn Cd

~~PH~~  
PH

Ph

A-Pond - 7.533

LAGOON - 7.386

## DATA RESULTS:

SAMPLE	Cu ppm	Ni ppm	Cr ppm	Ph ppm	Cd ppm	Zn ppm
A-POND 5-6	12.68 ppm	2.597 ppm	1.535 ppm	0.85 ppm	0.053 ppm	0.236 ppm
LAGOON (6-6)	0.48 ppm	0.107 ppm	0.022 ppm	0.15 ppm	0.019 ppm	0.317 ppm

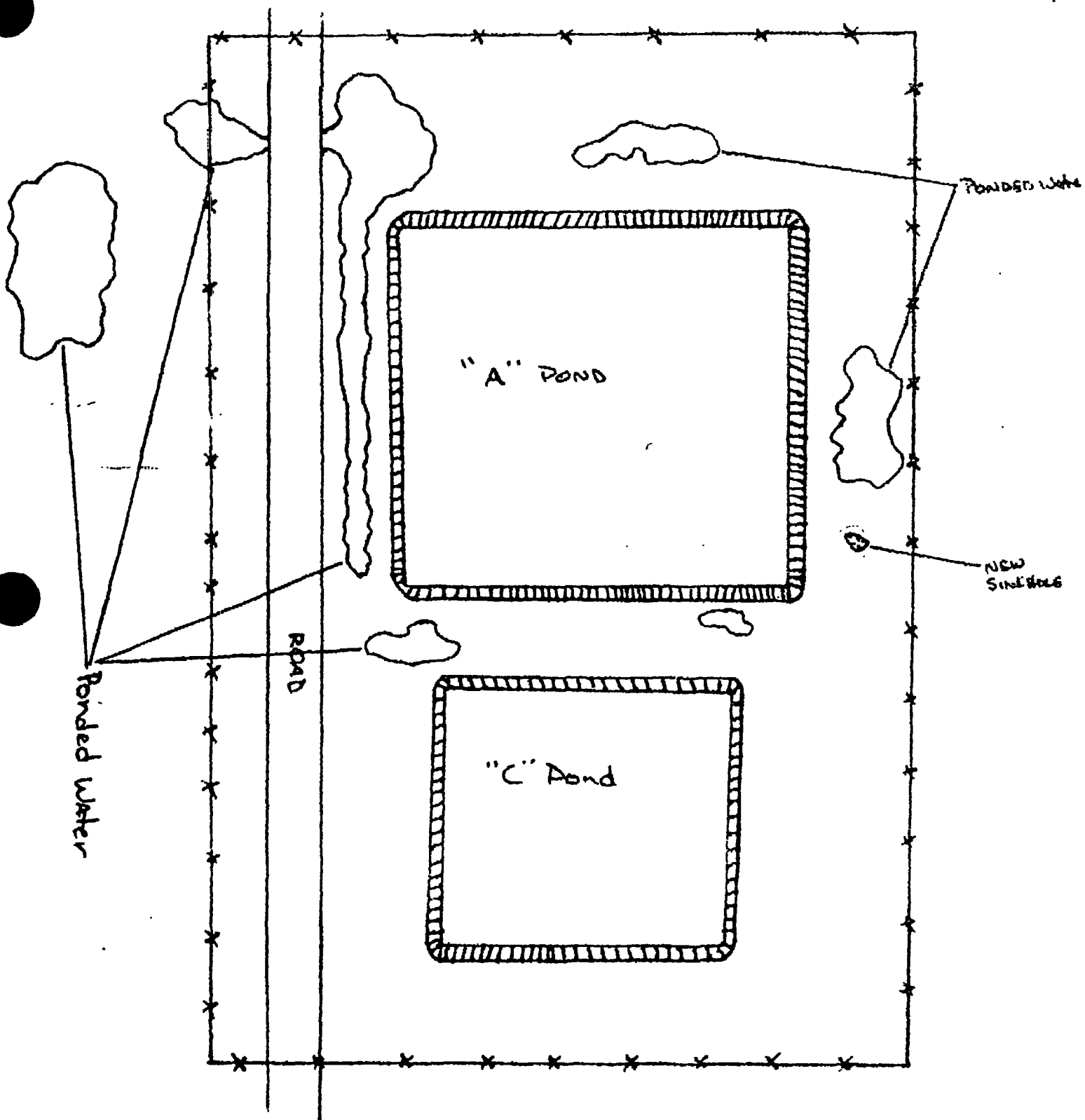
## CALCULATIONS:

 Lab \_\_\_\_\_ DATE & TIME COMP. **3/18/82 0600**

Distribution: Originator, Lab file. Originator is responsible for any additional distribution.

↑ TO IRRIGATION FIELD

N





*Attn: Lyle Crocker*  
*MDNR*

*Lyle*  
*Please find*  
*Shane*  
*Joe*

Mr. Ron Enos  
President, Advanced Circuitry Division  
Litton Industries Incorporated  
P.O. Box 2847  
Springfield, Missouri 65803

EPA I.D. No.: M00007132903

FACILITY LOCATION:  
4811 Kearney  
Springfield, Missouri 65803

Dear Mr. Enos:

Enclosed is a revision to emergency permit M0P000000104, issued to your firm on March 24, 1982. This permit, as revised, is effective immediately and replaces the conditions specified in our letter and permit of March 24.

In accordance with recent discussions with the Missouri Department of Natural Resources, we agree that significant potential exists for catastrophic sinkhole collapse in the bottom of your firm's storage lagoon (Pond A). Since it is imperative to minimize the hazard to the vicinity groundwater, the Advanced Circuitry Division of Litton Industries, Incorporated is hereby authorized and directed to discharge and treat the wastewater contained in Pond A in accordance with the following conditions:

1. Litton Advanced Circuitry Division (ACD) shall discharge as much wastewater as possible and acceptable to the Springfield city sewer until all liquid portions are removed from Pond A.
2. As an alternate to paragraph (1), and as may be necessary to empty the lagoon, wastewater from Pond A shall be applied by spray irrigation on Litton ACD property (30 acres more or less available for spray irrigation) at a rate of approximately one-third inch per day.
3. Wastewater shall not be applied directly to any known sinkholes on the property.
4. Removal of the liquid portion of the lagoon reduces the danger of a catastrophic collapse of Pond A. However, hazardous sludge and contaminated soil will remain in the lagoon bottom posing a threat to groundwater if a sinkhole should develop in the lagoon bottom. For that reason, Litton ACD is hereby ordered to submit to the Waste Management Branch, for approval, a revised closure plan specifically addressing removal of the sludge and contaminated soil. This plan shall include a revised timetable and shall be submitted by April 15, 1982.

ARMH/WMBR-PMTS:HPerry-Williams:Dennis Degner:Lah:x6531:4-1-82:Disk 8

PMTS  
Perry-Williams

PMTS  
Degner

PMTS  
Harrington

WMBR  
Morby

ARMH  
Spratlin

ARMH  
Wagoner

RCAD

5. Litton ACD shall provide to Mr. Robert Morby, Chief, Waste Management Branch a log of all actions taken by Litton regarding this project. This log shall be maintained and provided to this office a weekly basis.

6. Litton shall not take any action not expressly specified in this permit unless prior approval is given by MDNR or the Environmental Protection Agency (EPA). In the event of an emergency, Agency personnel can be contacted at (816) 374-3778 (24-hour number).

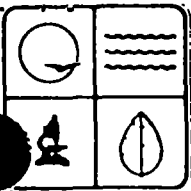
This emergency permit will expire on April 30, 1982, unless the U.S. EPA, Region VII finds it necessary to terminate it sooner in order to protect human health or the environment. This permit does not preclude Litton ACD from complying with other state or federal laws and regulations.

Sincerely yours,

John J. Franks, Jr.  
Regional Administrator

cc: Robert J. Schreiber, Jr., MDNR

bcc: Michael Sanderson, NWCM  
Bill Kaffer, RP&R  
Karen Flournoy, ARSM/WMER



## MEMORANDUM

Date: March 25, 1982  
To: Burt McCullough, Springfield Regional Office  
From: James H. Long, Director, Laboratory Services Program  
Subject: Analysis of DNR Collected Samples by Litton Advanced Circuitry

Litton Advanced Circuitry of Springfield, Missouri will be analyzing samples collected by the Missouri Department of Natural Resources (DNR) as part of an effort to document groundwater quality and the potential impact of irrigating from Litton's "A" lagoon.

In order for the data to be credible and defensible the following tasks must be performed and information supplied by Litton:

1. Precision and Accuracy figures must be calculated from existing in-house data (if available) or from data derived from duplicate analyses and control samples in this study. The control will be provided by the DNR.
2. Litton must provide, in writing, the concentration of the lowest standard used in the analysis of each parameter included in this project.
3. Litton must analyze control samples provided by the DNR. Control samples must be analyzed with each group of actual samples analyzed in this project. A group of control samples has already been forwarded to Burt McCullough and Litton should request replacements when the supply is one-half consumed.
4. Samples provided to the DNR, Laboratory Services Program (LSP) to be analyzed as check samples must be actual split samples and not duplicates and should comprise approximately 10% of project sample load.
5. The parameters Iron and Calcium should be included with the other parameters, at least for the split sample portion of the project. This should allow a better comparison of data between the two labs.
6. If Litton Advanced Circuitry of Springfield has participated in any audit programs (i.e. USGS, EPA, etc.) the results should be made available for review by the DNR, LSP QA Specialist.
7. Litton must retain all original data, including calculations, for on-site review by the DNR, LSP QA Specialist.

MISSOURI DEPARTMENT OF NATURAL RESOURCES  
P.O. Box 1368 2010 Missouri Blvd. Jefferson City, Missouri 65102 (314) 751-3241

Christopher S. Bond Governor  
Fred A. Lafser Director

Division of Environmental Quality  
Robert J. Schreiber Jr., P.E. Director

Burt McCullough  
Page Two  
March 25, 1982

8. Whenever possible, Litton should use strip chart recorders on the instrumentation used to analyze the samples in this project. This includes the parameters  $\text{NH}_3$  and Cyanide. This will allow for better verification of data.
9. All sample collection and preservation activities must follow EPA approved methodology.

Should a clarification of these requirements or additional information be needed, it can be obtained by contacting David S. Paulsen, QA Specialist, DNR, LSP at 314-751-3241.

JHL:mjn

cc: Mr. John Nixon  
Mr. Harold L. Patrick  
Mr. Robert S. Miller  
Mr. Edward S. Lightfoot  
Mr. Robert J. Schreiber, Jr., P.E.  
Waste Management Program  
Water Pollution Control Program  
David S. Paulsen